DOCUMENT RESUME

ED 115 684 TM 004 957

AUTHOR Boldt, Robert F.; Gitomer, Nancy L.
TITLE Editing and Scaling of Instrument Packets for the Clinical Evaluation of Narcotic Antagonists. Final Report.
INSTITUTION Educational Testing Service, Princeton, N.J.
REPORT NO ETS-PR-75-12
PUB DATE Jun 75
NOTE 98p.

EDRS PRICE MF-$0.76 HC-$4.43 Plus Postage
DESCRIPTORS Alcoholism; Behavior Change; *Behavior Rating Scales; Content Analysis; *Drug Addiction; *Drug Therapy; *Editing; Interviews; *Item Analysis; Narcotics; Questionnaires; Statistical Analysis; Test Construction
IDENTIFIERS Naltrexone

ABSTRACT

Efforts of the National Academy of Sciences (NAS) as a contractor to the National Institute on Drug Abuse (NIDA) include: (1) assessment of the usefulness of naltrexone, a narcotic antagonist, in the rehabilitation of several types of opiate-dependent individuals; (2) assessment of any drawbacks to the use of naltrexone; and (3) appraisal of acceptability of naltrexone in the addict populations under study. The role of Educational Testing Service (ETS) in the overall study effort was to provide services facilitating the interpretation of changes in behavior occuring in response to narcotic antagonist treatment. ETS undertook a review of data forms NAS-3, Background Interview; NAS-6, Craving Scale; and NAS-11 Status Interview; and the User's Manual with the intent of editing and modifying, when necessary, from the standpoint of clarity. Draft reports of the editorial comments are included as Appendix 1. Subsequent comments and suggestions pertaining to earlier revisions of forms and the revised manual are presented in Sections 2 and 3. The second goal of the ETS effort was to develop behavioral scales to provide a simplified summary of behavioral variations during the course of the study. Scales which were statistically feasible are presented in Section 4 along with the statistical information which led to their development. (RC)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED115684

Subcontract No. MS 45-74-94: Editing and Scaling of Instrument Packets for the Clinical Evaluation of Narcotic Antagonists

FINAL REPORT

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

by

Robert F. Boldt

Nancy L. Gitomer

TM 004 957

15 May 1975

Educational Testing Service

Princeton, New Jersey

PR-75-12

Introduction*

The purposes of the current efforts of the National Academy of Sciences (NAS) as a contractor to National Institute on Drug Abuse (NIDA) for the "Pilot Studies Evaluating the Use of Narcotic Antagonists in the Treatment of Opiate Addiction" include: a) the assessment of the usefulness of naltrexone, a narcotic antagonist, in the rehabilitation of several types of opiate-dependent individuals, when employed within the context of a comprehensive therapeutic program; b) the assessment of any drawbacks, such as toxicity, to the use of naltrexone; and c) the appraisal of acceptability of naltrexone in the addict populations under study. Individuals included in the study represent three distinct addict populations: a) "street addicts," or individuals who have not been forced by circumstance, such as jail sentences, to abstain from opiate use or who have been unsuccessful with, or haven't tried, other methods of opiate withdrawal; b) former addicts who are not presently addicted (e.g., parolees, probationers, released prisoners) but who are at a high risk of relapse or readdiction; and c) individuals who have been successfully treated in methadone or methadyl acetate maintenance programs but who currently wish to become opiate-free.

The study follows the format of a double blind comparison of the effectiveness of naltrexone versus control placebo within the context of a comprehensive program for the treatment of patients with a history of physiological dependence on opiates. All males over the age of eighteen

---

* Information describing the overall study was obtained from the 15 December 1974 version of the User's Manual (General Goals and Hypotheses; Study Design).

who present themselves for treatment at any of the study clinics are considered as a population from which subjects could be recruited for this study. Determination of eligibility for further consideration is based on defined criteria set up for each population or Protocol group. Eligible patients who sign an informed consent comprise the sample for study. These patients are then detoxified and randomly assigned to one of two study treatment cells (Naltrexone or Placebo).

The role of the Educational Testing Service (ETS) in the overall study effort is to provide services which will facilitate the interpretation of changes in behavior occurring in response to narcotic antagonist treatment. As part of the subcontract agreement with NAS, ETS undertook a review of data forms NAS-3, Background Interview; NAS 6, Craving Scale; and NAS-11, Status Interview; and the User's Manual with the intent of editing and modifying, when necessary, from the standpoint of clarity. The first draft of editorial comments was submitted to NAS on 4 September 1974. The second draft was presented on 2 December 1974. Both reports are included as Appendix 1 of this paper. Subsequent comments and suggestions pertaining to the 1 November 1974 revision of forms and the 15 December 1974 revised Manual are presented in Sections II and III.

The second goal of the ETS effort was to develop behavioral scales in areas of particular interest to the study. Scales which were noted in the subcontract agreement are presented below. Item numbers refer to the 1 May 1974 revision of NAS-3. Numbers corresponding to the 1 November 1974 revision are given in brackets [ ].

Behavior	Items on NAS-3
Opiate Behavior	23c, d, e [24c, d, e] separately and combined (4 scales)
Non-Opiate Drug Behavior	23f through k [24f-k] separately and combined (7 scales)
Other Drug Behavior	23a, b, and 1 [24a, b, and 1] separately (3 scales)
Combined Scale (Drugs)	23 through 25 [24-26] (1 scale)
Alcohol Behavior	26a, b, c [27a, b, c] separately and combined (4 scales); 26 through 28 [27-29] combined (1 scale)
Contacts with Law Enforcement	31 [32] (1 scale); 29 through 32 [30-33] combined (1 scale)
Education/Employment	9 [10] (1 scale); 13 through 16 [14-17] (1 scale)
Stability of Living Arrangements	6 through 8 [7-9] combined (1 scale)
Constructive Use of Time	9, 13 through 16, 25, 28, 32 [10, 14-17, 26, 29, 33]

The development of the scales (above) was intended to provide a simplified summary of behavioral variations during the course of the study. A thorough analysis of the available data, however, led to the conclusion that many of the requested scales were not statistically feasible. Where this was found to be true, qualifying information (i.e., item correlations and summary statistics) is presented in the body of this report. The remaining scales are presented in Section IV of this paper along with the statistical information which led to their development.

One note of caution should be introduced about the data presented here because of difficulties encountered in locating cooperative subjects. The 113 cases for which analysis is presented should not be regarded as a sample in any technical sense. These data cases are simply

those of individuals who supplied data which was analyzed to develop suggestions for the various scales. The composition of the study group was determined according to the definition of the Protocol groups.* In particular, it should be mentioned that only nine of the 113 subjects were "street addicts"; the group is probably not typical of those who are normally thought of when describing the American drug problem.

---

* See Appendix IV for a more complete description of these groups.

CONTENTS

I.	General Comments	1.1
II.	Suggestions for Future Questionnaire Development	2.1
	NAS-3: Background Data Interview	2.1
	NAS-11: Status Interview	2.10
III.	Suggested Revisions for User's Manual	3.1
	NAS-3: Background Data Interview	3.1
	NAS-11: Status Interview	3.12
	NAS-12A: Global Evaluation	3.13
	NAS-12B: Six Month Follow-Up Global Evaluation	3.13
IV.	Behavioral Scales	4.1
	Opiate Behavior	4.3
	Non-Opiate Behavior	4.4
	Other Drug Behavior	4.6
	Combined Drug Scale	4.6
	Alcohol Behavior	4.7
	Contacts with Law Enforcement	4.9
	Education/Employment	4.10
	Stability of Living Conditions	4.11
	Constructive Use of Time	4.12
V.	Summary and Conclusions	5.1
	Combined Drug Use	5.3
	Alcohol Behavior	5.3
	Stability of Living Conditions	5.3
	Education/Employment	5.4
	Constructive Use of Time	5.4

Appendix I: 4 September Editorial Comments

2 December Editorial Comments

Appendix II: Job Classifications for Collected Data

Appendix III: Definition of Study Protocol Groups

Appendix IV NAS-3: Background Interview

Appendix V: Table

1. General Comments

A thorough understanding of the usefulness of naltrexone can only be obtained if the study instruments are administered in a way which reflects a common understanding of the investigation, the clinics, and the interviewers. Although the Manual insures that all interviewers can have access to the same information concerning individual items, it is necessary to acknowledge that not all interviewers will be readers of Manuals, and that the intent of some items are not obvious on reading. Therefore, steps should be taken to alert interviewers to the necessity of a careful review of the Manual prior to patient contact. It is suggested that a cover letter be sent to all clinics with the forms and Manuals stressing the importance of a thorough review of the Manual and instruments before conducting the required interviews. Examples of NAS-3 (Background Data Interview) items which are particularly problematic (such as item 18c) can be noted in such a letter as evidence of the necessity of reading the Manual. Within this correspondence, interviewers should also be urged to conduct a staff rehearsal of interviews before proceeding to actual patient administration.

An often overlooked secondary aim of study instruments is to provide a link between current study data and other similar studies in the field. For this reason it is important to seek descriptive data which are comparable to those of other drug studies. Measures of socioeconomic status (including employment, educational level, income, etc.), are instances of this type of data. As a part of its task of editing form NAS-3, ETS conducted a brief review of studies in the field of drug abuse to uncover such measures which could be incorporated into the current study instruments. A large portion of these studies described their addict populations in terms of age and a single or combined measure of socioeconomic status. From this review, it can be concluded that the information sought

on NAS-3 items 1, 3, 4, 5, and 14 will provide sufficient data for use by researchers who wish to compare the present study with other study efforts relating to drug abuse in adult male populations. In Section II of this report, suggestions will be made for item 13 (NAS-3) which will also serve this purpose.

While secondary to study aims, a reduction in the volume of paper necessary for the required materials may be helpful in reducing project costs and storage problems. It is felt that such a reduction could be instituted without sacrificing form content. Forms NAS-3 and NAS-11 could easily be condensed by allowing less space between items and by completely filling all pages. While such an effort may only reduce form lengths by one to two pages each, such a saving could be substantial when the volume of patients and printing, copying, and mailing costs are considered.

Another suggestion for reducing the volume of paper deals with NAS-6 (Craving Scale). This instrument is administered at the same time intervals as forms NAS-3 and NAS-11. It may be helpful to transfer the scale onto a heavy material which is sturdy and is easily erasable. The instrument could be administered in the same manner but, instead of using a separate form for each patient, the same instrument could be used for all patients and the response could be recorded in a space provided on form NAS-3 or NAS-11. This method would provide a saving of 16 pages per patient over the course of the study.

II. Suggestions for Future Questionnaire Development

The following sections include general comments and suggested revisions pertaining to the 1 November version of NAS data collection instruments. These suggestions are the product of a literature search, a brief review of item responses from data which have already been collected, and of discussions with several ETS staff members whose strengths lie in questionnaire development and usage.

A. Items Suggestions

NAS-3-Background Data Interview

Item 4. It is felt by many people that the causes, and therefore the results, of divorce or separation and death of spouse are different. The differences, presumably related to interpersonal processes, might be related to dependent variables in the present study. Cahalan, for instance, found that divorced and separated men were more likely to be heavy alcohol drinkers than married or widowed men.* The following revision is therefore suggested:

4. Marital Status
   1. Currently married
   2. Widowed
   3. Separated or divorced
   4. Never married

Item 7. While adequately serving the present purpose, it is felt that the response alternatives for this item could be expanded to give a more informative picture of the subject's living situation. Analyses might

---

* Cahalan, D.; Cisin, I. and Crossley, H. American Drinking Practices New Brunswick, N. J.: Rutgers Center for Alcohol Studies, 1969.

show, for instance, that subjects living with friends are less apt to succeed in the program than are those living with a spouse or with parents. Learning that a subject was living with a girlfriend at the onset of the program (from NAS-3) and with his wife after six successful months in the study (NAS-11) could give a much clearer indication of change than would learning that this same subject lived "with others" at the time of both interviews. The following item format is therefore suggested:*

7. Do you live
   1. Alone
   2. With spouse (and children)
   3. Parent(s)
   4. Friend(s)
   5. Girlfriend
   6. Jail
   7. Therapeutic community
   8. Other

Item 8. As it now stands, a subject who chooses response 2 (no) for this item will appear less stable than a subject who selects response 1 (yes). For a number of cases this assumption may be true but in some cases a 2 response could be given by a much more stable individual. For instance, if the alternatives suggested for item 7 are used, a subject may

---

* These alternatives, with the exception of number six, are taken from Coskey, W. R., Ispen, J., and Premkukmar, F. "An Inquiry into the Nature of Changes in Behavior Among Drug Users in Treatment," from Appendix IV in Drug Use in America: Problem in Perspective, National Commission on Marihuana and Drug Abuse, 1973 (p. 340).

have chosen response 5 (girlfriend) on NAS-3 and, after the first three months, choose response 2 (spouse and children). The response on item 8 would then be 2 (no), an indicator of instability, but it would seem that this individual must be more stable than an individual who selected response 5 (girlfriend) on both NAS-3 and NAS-11 and thus selected response 1 (yes) on item 8.

It is suggested that item 8 be changed as follows:

8. Has this living arrangement remained the same during the past three months?

   1. Yes
   2. No

8a. If no, with whom do you now live?

   1. Alone
   2. With spouse (with or without children)
   3. Parents or other parents
   4. Friends or other friends
   5. Girlfriend or other girlfriend
   6. Jail
   7. Therapuetic community or other therapuetic community
   8. Other

Items 10a and 10b. The word "accredited" in both of these items may cause undue difficulty. The distinction between accredited and non-accredited is a fine one at best and, possibly, is unnecessary. Perhaps the question could be made clearer by rephrasing as follows:

10a. Report the numbers of hours per week that you attend a formal educational program which leads to a certificate of completion or diploma.

10b. Report the number of hours per week that you are involved in a vocational training program which does not lead to a certificate of completion or diploma.

Items 11 and 13. Many possible job classification scales have been reviewed in the search for the one scale which would be most informative while presenting the least amount of difficulty to interviewers. It is felt that the job classification scheme used in the Dictionary of Occupational Titles (D.O.T.) is best suited to this purpose. First, the job classes are well defined and thus jobs can be easily placed into their proper categories. For those jobs which are unfamiliar or which have dubious class ties, the D.O.T. is an easy reference source which can be found in most public and college libraries. This reference system insures that the job classification system will be constant across all clinics. Finally using the D.O.T. system insures that any possible job response will have a proper place within the system. This allows for easy classification of present data without the exclusion of future job responses. The following occupation classes are thus suggested:

1. Professional, technical and managerial
2. Clerical and sales
3. Service
4. Farming, fishery, forestry, and related
5. Processing
6. Machine trade
7. Bench work
8. Structural work
9. Miscellaneous
10. Student

Descriptions of these categories are presented in the "Manual" Section (III) of this report. Appendix 2 shows how the system works using current study data as an example.

Item 14. It is important for purposes of comparison over time that upward progress within a job be noted. The following addition is therefore suggested:

14a. In the last 90 days (three months) have you received a promotion in your current position. (Do not consider promotions which were a direct result of job changes).

1. yes
2. no

Item 16. In order to accurately note a patient's progress within a job setting it is important to obtain information which relates the employer's picture of the patient employee. Since salary raises or increases are one method by which employers can reward an employee's on-the-job performance, the following item additions are suggested:

16a. During the last 90 days (three months) did you receive a salary increase or raise in your current position (salary increases which are a result of job changes should not be included).

1. yes
2. no

16b. If you received a raise, how much money was added to your monthly take-home wages or salary?

1. $1-25
2. $26-50
3. $51-75
4. $76-100

5. $101-150

6. $151-200

7. $201-250

8. $251-300

9. more than $301

Item 18a. The response alternatives given in this item do not appear to be mutually exclusive. What, for example, would be the primary reason for being in the program for a patient whose poor health makes it impossible for him to obtain the money necessary to pay for opiates. If an individual must "get off" heroin in order to maintain his parole status and to keep his marriage together, is his primary reason self (#1), wife (#2) or criminal justice system (#4). These examples seem not only feasible but also probable when the overall life situation of the addict is considered. One way to overcome this difficulty is to allow multiple answers. This, however, may cause additional problems because it is not beyond reason to expect that, for some patients, all of the response possibilities may be applicable. The following revision is therefore suggested:

18. Who is most responsible for your desire to be opiate-free?

    1. Self

    2. Wife

    3. Relative or friend

    4. Criminal justice system

And what is the primary reason?

    5. Poor health

    6. Must join a program to keep on parole

    7. Difficulties in obtaining money

    8. Difficulties in obtaining opiates

    9. Legal consequences if caught (other than parole violation)

    10. Other _____(specify)

Item 18b. After conversing with the patient over the course of the interview it seems reasonable to expect that the interviewer would have enough information on which to make the judgement necessary to answer this item. It is therefore suggested that the format of this item be left intact. It may, however, ease the interviewer's task if the item were placed, along with item 18c, at the end of the interview. This would allow the interviewer more time as well as more information on which to base the necessary judgement.

Item 18c. It is reasonable to expect that not all interviewers will be Manual readers. Thus even when Manual instructions clarify ambiguities it is important to construct questions which are clear to these select few. The following rewording of this item is suggested to incorporate Manual instructions into the actual item:

18c. Interviewer/staff impression of patient's motivation to be opiate-free.

1. None
2. Slight
3. Moderate
4. High

Item 23a. This item stem does not make any references to other treatment programs. The following addition is suggested:

Since you became addicted, has there ever been a period of one week or more (excluding jail, hospital, and this or other treatment programs) when you did not use opiates?

Item 23c. The suggested alternatives mentioned in the comments for item 18a may also apply here.

Item 24. Analysis of the data has led to the conclusion that Column B (Pattern of Use) represents only a rough scaling of Column A (Numbers of days used). It would thus seem likely that the use of both columns is unnecessary. It is suggested that only Column A be used because given this information the response for Column B can more readily be determined; the reverse (i.e., Column B to Column A) is not true. The following chart serves to illustrate this point:

If Column A is	then	Column B will be
0 days		0
1-12 days		1
13-89 days		2
90 days		3

While this example may not always hold true (there will be variation between days used and pattern responses 1 and 2) it held true virtually without exception in the present data. Eliminating Column B and using Columns A and C only will offer the added advantages of saving both time and space. The following item format is thus suggested:

24. For the drugs listed below, please give information requested at right for the last 90 days.	Column A Number of days used	Column B Frequency
a. cigarettes		
b. coffee		
c. ...		

Item 25. The wording of this item gives the "purpose" categories an ambiguous nature. Sleep (#1) could be interpreted as a drug taken in order to sleep (i.e., to alleviate sleeplessness) or as a drug taken to avoid sleep (i.e., to stay awake). The meanings of #2 - #4 seem clear based on the assumption that the majority of individuals would not take drugs to cause

discomfort and thus it is easy to infer the unmentioned "to alleviate" or "to reduce" which could precede "pain" (#3), nervousness (#2), or "depression" (#4). Diet (#5) is, similar to #1, ambigous in that there are drugs (e.g., amphetamines) which can be used as reducing aids while there are other drugs (e.g., vitamins) which can be used as diet supplements. To clarify the purposes given the following revisions are suggested:

1. To sleep
2. To avoid, reduce or alleviate nervousness
3. To avoid, reduce or alleviate pain
4. To avoid, reduce, or alleviate the "blues" or depression
5. To aid in weight loss
6. To stay awake
7. Other _____(specify)

Item 27. Following the reasoning presented for item 24, it is suggested that Column B (pattern of use) be eliminated from the question, leaving only Column A (number of days used) and Column C (quantity consumed). While the transformations from Column A (days used) to Column B (pattern of use) differ because of the expanded response alternatives in this item, Column B still represents only a rough scaling of Column A.* Since it is reasonable to assume that some patients will drink only on weekends, it is suggested that a 'w' be placed next to the number of days used (Column A response) for those patients who confine their drinking to weekends only (i.e., Friday nights, Saturday, and Sunday). The following item format is thus suggested:

	Column A	Column B
27. For the alcohol listed below, give the information requested at right for the last 90 days.	Number of days used (if weekends only, mark 'w' next to number)	Quantity Consumed
a. beer		
b. wine		
c. hard liquor		

* The necessary transformation table is presented in Section IV.

Item 28b. One early warning sign of alcoholism is an individual's inability to realize cause and effect links between drinking and other events.* While, in this particular item, a patient may realize that he was arrested while intoxicated he may give a zero response because he believes that the arrest was attributable to other causes (e.g. harrassment by another individual which resulted in a fight or marital problems resulting in careless driving). The following revision is therefore suggested:

28b. How many times in the last 90 days (three months) have you been arrested while intoxicated?

Item 29a. Using the same line of reasoning that is presented for item 28b, the following revision is suggested:

29a. How many times in the last 90 days (three months) have you missed work or been late to work after drinking?

NAS-11 Status Interview

Item I. Knowing that a patient either likes or dislikes the program would not be as helpful as knowing the specific aspects of the treatment for which the patient has had strong favorable or strong unfavorable reactions. It is possible that drop-out rates could be a reaction to an area of the program which is not directly related to naltrexone, but rather to some administrative aspect of the study. Such information could lead to ideas

---

* See, for example, McCord, W. and McCord, J. Origins of Alcoholism. Stanford: Stanford Press, 1960.

for future projects as well as allowing investigators to understand specific aspects of the program which are found to be unfavorable on a large scale.

It is suggested that the response alternatives be expanded to include specific aspects of the program which are felt to be especially important. If the information is to be used only by study coordinators, perhaps an open-ended question would prove to be most helpful. Patients who respond negatively to the present question could be asked, for example, to explain their answer. Other item alternatives could be presented but it is felt that individuals who are closer to the actual treatment program would have more information from which to make suggestions.

Comments and suggestions on NAS-3 items (item numbers are given in parentheses) apply to corresponding items in NAS-11: 3(7), 4(8), 5(9), 7b(10b), 13(24), 14(25), 16(27), 18(29), 20(33).

III. Suggested Revisions for User's Manual

A. Specific Comments

Page 2

2f. Administration of the MMPI is scheduled during the Induction Period when the "patient's condition is as stable as may be expected." It is possible that different types of interviewers may have different criteria for stability. A nurse, for instance, may view stability from a medical standpoint and thus administer this data instrument when the patient's temperature, blood pressure and heart beat are stabilized. A social worker, on the other hand, may look for signs of mental stability before administering this same instrument. It is thus suggested that some criterion for stability be included in this instruction. Such a criterion could be behavioral in nature (e.g., absence of tremors, steady hands, or no outward indicators of excessive nervousness or tension) or medical (e.g., pulse, temperature, etc.) but should be easily noted by all interviewers. This specification will help to insure consistency of response situations across interviewers and across clinics.

NAS-3 Background Data Interview

Name and Title of Reporter

"The staff personnel selected to be responsible for these interviews (which will be as few in number as feasible) should conduct initial or pilot interviews, ..."

It is felt that the construction of this sentence shadows an important point with ambiguity. It is unclear whether the parenthetical statement refers to personnel, which would place limiting responsibilities on the clinic, or to interviews, which would give this responsibility to the study coordinators.

While this situation may cause no major flaws in the data collection effort, it is felt that the following revision could help to ease the ambiguity and thus prevent possible problems before their onset:

... As few staff personnel as feasible should be selected to take responsibility for these interviews. These staff members should conduct initial or pilot interviews, with each interviewer scoring the same patient independently. "All forms should then be reviewed,..."

Item Definitions

Item 2. There is what appears to be a typographical error in the example which is presented with this item definition. It is suggested that a birthdate of March 17, 1930 should be entered as 3/17/40 on this item. While this may create no problem, as most Manual readers will readily note the error as a typographical one, a conscientious reader may feel that an additional instruction is implied in the example. It is thus suggested that the example be retyped to allow for agreement between the two dates.

Item 4. The instruction states that "common-law relationships judged to be lasting" should be considered as legal marriages. This creates two sources of ambiguity. First, what is a common-law relationship: is it a common-law marriage, for which the legal requirements differ by state, or is it simply some period of cohabitation? It is felt that the instruction should be rewritten to state that relationships involving cohabitation which have remained constant over a period of time should be considered as legal marriages. A general time criterion, perhaps one year, should be included in the instruction so that all interviewers will have guidelines by which to judge the degree to which a relationship is lasting.

In Section II of this report it was suggested that the response alternatives be expanded to include separate categories for divorced and widowed. The following corollary Manual revision is also suggested:

If a patient says that he is married, the response should be recorded as "1." If the patient was previously married but is presently separated (and the separation is judged to be permanent, i.e., continuous for [time criterion] on longer) or divorced (and not currently remarried), the response should be "2." If the patient is presently unmarried because of death of spouse, the response should be "3." If the patient has never been married, the response should be "4."

For purposes of this form, cohabitory relationships which are judged to be lasting (i.e., such relationships which have remained constant over a period of [time criterion] or more) should be indicated as response "1" (currently married). For relationships of this nature which do not meet the above criteria, the response should be "4" (unmarried) unless the criteria for "2" or "3" are present.

Item 5. The response code numbers given in this instruction do not correspond with the response alternative codes given in the item. This lack of consistency could pose undue difficulties for conscientious Manual readers. The following revision is therefore suggested:

... As a guide to equivalence, consider the following examples. A patient who completed part of his twelfth year of formal education and received further trade-school training, should be considered as one who "Completed High School" (#5). A patient who has completed nine years of education but has had the same training would be checked as "Attended High School" (#4). A patient who completed all but the last day of grammar

school and had no further training who would be checked as "Completed Grammar School" (#3). Patients who did not complete high school but have received high school equivalence diplomas should be check as "Completed High School" (#5). Trade schools which offer a degree or certificate of completion would be equivalent to "Completed High School" (#5), while trade schools which offer training which does not result in a degree or certificate would be equivalent to "Attended High School".

Item 7. In Section II of this report it was suggested that the response alternatives for this item be expanded to provide a more informative picture of the patient's living situation. In keeping with this suggestion, the following Manual revision is suggested:

If a patient is currently living alone (and is not residing in jail or a therapuetic community), mark response #1. If the patient is married and is currently living with his wife (with or without children) or if the patient fills the cohabitation criterion for response #2 in Item 4, mark response #2. If the patient is presently living with his parents, mark #3; if he is living with one (excluding his girlfriend) or more friends, mark #4. If a patient is living only with his girlfriend, mark #5: if he is living with a group of friends one of whom is his girlfriend, mark #3. If a patient is living in jail, regardless of whether or not he has cellmates, mark #6; if he lives in a therapuetic community (e.g., hospital, half-way house, etc.) mark #7 regardless of whether or not he has roommates. If a patient is living in a situation which is not included in categories #1-#7, mark #8. Care should be taken, however, in using this last category. Enter the correct response on line at right.

Item 8. It was suggested in Section II that additional response alternatives might also make this item more informative. In keeping with this suggestion, consider the following Manual revision.

8. If there has been no change in living companion status for the past three months, mark response #1 and skip to item 9. If there has been a change, mark #2, and continue to item 8a.

8a. Following instructions for item 7, mark the applicable response category number. For example, if a patient was living with his parents but now lives alone, mark #1. If a patient was living with his mother but now lives with his father, mark #3.

Items 10a. and 10b. In Section II, it was suggested that the distinction between accredited and non-accredited training programs requires a judgement which interviewers may not be qualified to make and which, at best, would vary from interviewer to interviewer even when judging the same patient. In keeping with earlier suggestions for item revisions, the following Manual revisions are suggested:

10a. If a patient is presently attending high school, junior college, college, trade school, secretarial school, or any other organized formal educational program which leads to a certificate of completion, degree, or diploma, record the number of hours he attends class each week. If no such classes are attended, write "0."

10b. If a patient is involved in any on-the-job training, apprenticeship program, or other vocational program which leads to a serviceable trade but which does not lead to a certificate of completion, diploma, or degree, record the number of hours he attends the program each week. If he is not involved in such a program, write "0."

Items 11 and 13. A job classification scheme was suggested in Section II of this paper. The following Manual addition is suggested to define the categories used. In addition to this reference, interviewers should be instructed to use the Dictionary of Occupational Titles (Volume 1, Definitions of Titles) whenever there is a question regarding which category a specific job fits. Classifications are made on the basis of the first number in the D.O.T. job code. Codes "0" and "1" in the D. O. T. are classified in response "1" of the present study. Code "0" has been added to allow for the classification of students.

Description of Categories*

1. Professional, technical, and managerial occupations

This category includes occupations concerned with the theoretical or practical aspects of such fields of human endeavor as art, science, engineering, education, medicine, law, business relations, and administrative, managerial, and technical work. Most of these occupations require substantial educational preparation (usually at the university, junior college, or technical institute level).

2. Clerical and sales occupations

This category includes occupations concerned with preparing, transcribing, transferring, systematizing, and preserving written communications and records; collecting accounts; distributing information; and influencing customers in favor of a commodity or service. It also includes occupations closely identified with sales transactions even though they do not involve actual participation.

---

* These descriptions are taken from Dictionary of Occupational Titles: Volume One, Definitions of Titles, 3rd Edition. Washington, D. C: United States Government Printing Office, 1965.

3. Service Occupations

This category includes occupations concerned with performing tasks in and around private households; serving individuals in institutions and in commercial and other establishments; and protecting the public against crime, fire, accidents, and acts of war.

4. Farming, fishery, forestry, and related occupations

This category includes occupations concerned with growing, harvesting, catching, and gathering land and aquatic plant and animal life and the products thereof, and occupations concerned with providing services in support of these activities.

5. Processing Occupations

This category includes occupations concerned with refining, mixing, compounding, chemically treating, heat treating, or similarly working materials and products. Knowledge of a process and adherence to formulas or other specifications are required in some degree. Vats, stills, ovens, furnaces, mixing machines, crushers, grinders, and related equipment or machines are usually involved.

6. Machine Trades Occupations

This category includes occupations concerned with feeding, tending, operating, controlling, and setting up machines to cut, bore, mill, abrade, print, and similarly work such materials as metal, paper, wood, and stone. Throughout this category the overall relationship of the worker to the machine is of prime importance. At the more complex levels, the important aspects of the work include understanding machine functions, reading blueprints, making mathematical computations, and exercising judgement to attain conformance to specifications. Coordination of the eyes and hands is the most significant factor at the lower levels. Disassembly, repair, reassembly, installation, and maintenance of machines and mechanical equipment,

and weaving, knitting, spinning, and similarly working textiles are included in this category.

7. Bench Work Occupations

This category includes occupations concerned with the use of body members, handtools, and bench machines to fit, grind, carve, mold, paint, sew, assemble, inspect, repair, and similarly work relatively small objects and materials, such as jewelry, phonographs, light bulbs, musical instruments, tires, footwear, pottery, and garments. The work is usually performed at a set position in a mill, plant, or shop, at a bench, worktable, or conveyor. At the more complex levels, workers frequently read blueprints, follow patterns, use a variety of handtools, and assume responsibility for meeting standards. Workers at the less complex levels are required to follow standardized procedures.

8. Structural Work Occupations

This category includes occupations concerned with fabricating, erecting, installing, paving, painting, repairing, and similarly working structures or structural parts, such as bridges, buildings, roads, motor vehicles, cables, airplane engines, girders, plates, and frames. The work generally occurs outside a factory or shop environment, except for factory production line occupations. Tools used are hand or portable power tools, and such materials as wood, metal, concrete, glass, and clay are involved. Workers are frequently required to have a knowledge of the materials with which they work, e.g., stresses, strains, durability, and resistance to weather.

9. Miscellaneous Occupations

This category includes occupations concerned with transportation services, packaging and warehousing; utilities; amusement,

recreation, and motion picture services, mining and logging; graphic arts; and various miscellaneous activities.

Item 14a. In keeping with the suggestion presented in Section II, the following Manual addition is suggested:

14a. Ask the patient if he received a promotion in his current position during the last three months. Do not include promotions which are the result of a job change from one firm or company to another. If the patient received a promotion within his present job, mark "1" in the space provided at right. If he did not receive a job promotion, mark "2" at right.

Item 15. Instructions for 12 and 14 include specific references to weekends, holidays, sick leave, etc. The instruction for this item, however, includes no mention of how to deal with such time. It is suggested that a parenthetical statement be added which reads:

(including weekends, paid holidays, sick leave, etc.)

Item 16. This item instruction makes a clear reference to costs for room and board but does not clarify when such add-ins should be used. To alleviate a possible source of confusion, the following revision is suggested:

Select the coded interval which best represents the patient's take-home (net) wages during the past three months. This number could represent his total net earnings from all legitimate employment. If the patient receives room and board for his work, add this to his total earnings as room at $6.00 per night and meals at $3.00 per meal. Pay, room and board, etc., which was earned while incarcerated should not be included. Write the lowest applicable code at right.

In keeping with the suggestion presented in Section II, the following Manual additions are suggested:

16a. Ask the patient if he received a salary or wage increase (raise) in his present job during the past three months. Do not include salary increases which are a direct result of job changes from one firm or company to another. Include only salary increases which occurred in the patient's current job. If the patient has received a raise, mark "1" in the space provided at right. If he did not receive a raise, mark "2." If the patient is currently unemployed, mark "0."

16b. If the patient has received one or more salary increases in the past three months, determine the amount of money that has been added to his monthly take-home earnings. Select the lowest applicable code and record it in the space provided at right. If the patient has not received a salary increase, write "0" in the space provided. If the patient does not know his monthly increase, estimate the code using the following table.

Insert Table 3.1 here

Item 18a. In keeping with the revised item format suggested in Section II, the following Manual instruction is suggested:

Ask the patient who he feels is most responsible for his current desire to be opiate-free. Select the response category which best fits his answer and record its number at right.

Ask the patient his primary reason for this desire. Select the most appropriate response category and record its number at right.

Table 3.1

Table for determining wage increase code

Code	Hourly increase (40 hour week)	Weekly increase	Monthly increase	Yearly increase
1	<$.16	<$6	<$25	<$300
2	$.17-.30	$7-12	$26-50	$312-611
3	$.31-.45	$13-18	$51-75	$612-911
4	$.46-.63	$19-25	$76-100	$912-1211
5	$.64-.93	$26-37	$101-150	$1212-1811
6	$.94-1.25	$38-50	$151-200	$1812-2411
7	$1.26-1.55	$51-62	$201-250	$2412-3011
8	$1.56-1.88	$63-75	$251-300	$3012-3611
9	>$1.89	>$76	>$301	>$3612

Item 23c. In keeping with the revised item format suggested in Section II, the following Manual instruction is suggested:

Ask the patient who he feels was most responsible for his most recent opiate-free period.

Ask the patient his primary reason for abstaining from opiates during this period.

Item 24. In keeping with suggestions present in Section II, the following revision is suggested:

For each drug listed, ask the patient how many days during the past three months (90 days) he used the substance in question, and record this number in the appropriate row under Column A. For each non-zero entry in Column A, ask the patient the number of times he used the substance on a typical usage day. Record the number in the appropriate row under Column B.

Please note that only drugs which are not prescribed by a physician ("illicit") are to be indicated in response to this question. It is also suggested that a list of drug "street names" be included in the Manual to familiarize interviewers with drugs of which he(she) may not have been aware. Some patients may only be able to speak in street terms and interviewers should be ready to handle this without biasing study results.

Item 25. The use of "indications" in this instruction disturbs the continuity which should exist between item and Manual instruction. To preserve this continuity, it is suggested that the word "purpose" (taken from the questionnaire item) replace the word "indication" in the instruction. Also, while "indication" may be a common term which is readily understood by medical personnel, non- or paramedical personnel may find it to be unnecessarily confusing.

It is reasonable to expect that many interviewers will be unable to distinguish between the types of drugs mentioned. While the distinction between sedatives and tranquilizers may be quite clear to physicians and other medical personnel, for example, it seems likely that nonmedical interviewers would encounter undue difficulty with this difference in day-to-day data collection efforts. It is thus suggested that definitions for the types of drugs listed be included in the Manual. It is believed that medical personnel would be more able to make these distinctions clear, therefore, no drug definitions will be suggested.

Item 26. The instructions are not explicit on the point of whether all days or only drug usage days should be considered. It is suggested that the instruction be revised so that a clear reference to days is included.

Item 27. In keeping with the suggestions presented in Section II, the following Manual revision is suggested:

For every alcohol category listed, ask the patient how many days during the past three months (90 days) he drank alcohol of the type included in that category. Enter this number in the appropriate row under Column A. If the response given is less than 36 days, ask the patient if his drinking was confined to weekends (i.e., Friday night, Saturday, and Sunday). If yes, enter a "w" after the response in Column A. For each non-zero entry in Column A, ask the patient how much of the alcohol in question he consumes on a typical usage day. Enter the response on the appropriate row under Column B.

NAS-11 Status Interview

Item 1. If the suggestion presented in Section II is accepted, the Manual instructions should be revised to include a suggested method for obtaining and recording the information that is warranted. If an open-end response seems desirable, perhaps the patient should be given paper and several minutes in which to record his reactions. A tape recording of an interviewer/patient discussion about the program may also prove to be helpful.

Comments and suggestions presented for form NAS-3 also apply to NAS-11 where applicable.

NAS-12A - Global Evaluation and Termination Status

I. Staff Evaluation

It seems that the staff evaluation is likely to serve as at least one of the criteria of success for the program. Readers of the final report would be interested in understanding how the decisions or ratings recorded on this instrument were reached. Asking each staff member who has had contact with the patient to record his ratings independent of other staff members and then combining these responses (at the data processing stage) would, perhaps, give a better picture of patient progress than placing consensus responsibility on a single senior staff member. This method will also allow statistical comparison of agreement among raters, and agreement among the rating items. These data could also be very important in the assessment of study outcomes.

NAS-12B - Six-Month Follow-Up Global Evaluation

Suggestions presented for NAS-12A (Global Evaluation) also apply to this data form.

IV. Behavioral Scales*

Although the behaviors which are the concern of this study are complex in nature, a complex listing of results may not lead to an increased understanding. A simplified summary of results may prove to be more helpful. Data from 113 complete data cases were examined in an attempt to construct the scales listed on pages 2-3.** General practice suggests that several hundred cases would be needed for this procedure, but expectations of difficulty in the collection of data led to the decision to consider 60 to 100 cases as marginal. These limits preclude examination of data from individual clinics where the maximum number of cases available was 33, or indeed for Protocols separately since the number of cases were nine, 56, and 48 for Protocols 1, 2, and 3, respectively. Analyses were therefore based on the total sample.

Scoring procedures for the scales were to be chosen under two guiding principles: (a) the score weights were to maximize variation among respondents, and (b) the scale weights would be chosen to yield as understandable a scale as possible. Note that principle (a) relies on the data collected while principle (b) may not.

Before discussing the individual scales, results suggesting the deletion of column B (pattern of use) on items 23 and 26 (see items 24 and 27 on pages 2.8 and 2.9 in Section II) will be discussed. The underlined entries

---

* All item numbers mentioned in this section refer to the 1 May 1975 revision of NAS-3 unless otherwise noted.

** Complete data cases were defined as each case having a completed form NAS-3 and NAS-4.

along the minor diagonal of Table 4.1 account for 1356 of the responses to item 23, or 98%. The 23 responses which do not contribute to the total of the minor diagonals constitute departures from the literal meaning of the responses to the column B entries. In other words, "daily" (response 1) and 90 days (column A) correspond; "at least once a week" (response 2) ranges from unity to 12 which is used for one day in each of the weeks which make up the 90 days; and all other number of days, excluding 90, correspond to "more than once a week" (response 3). Thus, the responses to column A in item 23 could be transformed into estimated responses for column B and only 2% of the estimates would be wrong. It is therefore clear that column B is adding little information to the study; for this reason the suggestion to delete column B was made on page 2.8.

Table 4.2 contains a tabulation of item 26 (item 27 on the 1 November revision) which concerns alcohol consumption. The underlined items are those for which the number of days used (column A) agrees with the classification in column B (pattern of use). Of the 399 responses, 321 or 95% are counted in the underlined entries of Table 2. Except for the indication that drinking does or does not occur on weekends, the information obtained from column B is almost entirely contained in column A.

The recommendation that column A be retained and column B be dropped is made simply because there seems to be little point in relinquishing the fine-grain detail of column A through the use of the gross categorizations of column B. It is important to note, however, that if one wished to use a machine scored answer sheet, the format of column B would be superior to that of column A. The recommendations to use column A in items 24 and 27 are made, however, in the absence of plans for machine scoring.

A. Opiate Behavior

Items 23c, d, and e are concerned with heroin, illegal methadone, and other opiate use. The salient feature of the responses to these items is that while most patients reported using heroin, 102 and 104, of the 113 cases, respectively, reported no use of illegal methadone or other opiates. The use of one type of opiate is, therefore, independent of the use of another type, a correlation of -.08 between the number of days heroin was used and the number of days another opiate was used, indexing the strongest relationship noted.* When, instead of the number of days used, the number of "fixes" (the product of the number of days used and the numbers of times used on a typical day) were used, the correlation was -.05.

Combining the opiate items would produce a scale which is dominated by the heroin use data. There seems little point, however, in making the combination since heroin use, itself, is a separate item. If a combination were nevertheless required, one would have to rely heavily on judgemental bases. One such basis might be to estimate the total amount of active chemical used by a weighted sum of the number of "fixes" of the drugs,

---

* Correlations are computed to give an indication of the degree to which two variables (number of days on which heroin was used and the number of days on which methadone was used, for example) are related and the direction of this relationship (i.e., positive or negative). The correlation can range from +1.00 to -1.00. Thus, if a perfect relationship (a plot of the two would show a perfect ascending straight line) existed between two variables (e.g., if all users of heroin were also users of methadone and all non-users of heroin were also non-users of methadone) the correlation would be +1.00; if the two variables were totally unrelated, (a plot of the two appeared chaotic) the correlation would be 0; if they shared a perfect inverse relationship (a plot would give a descending straight line) the correlation would be -1.00.

using as weights the relative amounts of active chemical. To get this weighting seems to be a formidable task, one which is well beyond the scope of this project and whose difficulties might be appreciated by reference to the problems of Brown and Silverman,* who attempted to estimate the cost per pure gram of heroin in several U. S. metropolitan areas.

Clearly, the potential for gain is greatest in the heroin data where the possibility of the frequency of use taking different patterns remains real. The correlation between the number of days used and the number of times used on a typical day is higher than the correlations previously noted, but not so high that different patterns of typical daily use might not emerge for different numbers of days used. If it is highly desirable to reduce the analytical complexity, the product of the number of days on which heroin was used and the number of uses of heroin on a typical day may be the only data analyses needed for the scale.

B. Non-Opiate Drug Behavior

Items 23f through k deal with barbituates and sedatives, tranquilizers, cocaine, amphetamines or similar agents, hallucinogens, and marihuana. Many of these substances were used infrequently, with only six users of barbituates and sedatives, five users of amphetamines and similar agents, and no users of hallucinogens noted. Non-use of hallucinogens may be less a fact than a reflection that many of the users don't know the meaning of the word.

---

* George F. Brown, Jr. and Lester P. Silverman. The retail price of heroin: estimation and applications. Journal of the American Statistical Association, 1974, 69, 347 (595-606).

Similar to the opiate drug categories, the correlations between the number of days used are low in these data (no greater in absolute value than .09), with the exception of the correlations of number of days using barbituates and sedatives with tranquilizers (correlation of .49), with amphetamines (.50), and a (probably nonmeaningful) correlation of .16 for the use of marihuana with tranquilizers. Corresponding correlations for the number of uses in 90 days were .56, .53, and .28, with the next largest correlation in absolute value being .10. Note that although the use of barbituates and sedatives relates to the use of tranquilizers and amphetamines, the correlation between amphetamines and tranquilizers is not quoted as large (the correlation for both the number of days used and the number of uses is -.04). Based on these results one might be inclined to believe that the association between barbituates and amphetamines is attributable to their psychoactive characteristics but it seems more likely that the association is produced by the one case in which both drugs were used for a total of sixty days. Most other patients used neither barbituates nor amphetamines and if the one strong case is dropped, the correlation becomes -.01. Indeed, amphetamine use was very rare, as reported above.

Indications of the use of both barbituates and tranquilizers together are quite frequent considering the rather rare use of barbituates according to the data. It is possible that this relationship is an indicator of confusion as to the differences between the drugs. If this confusion does, in fact, exist--if the user isn't sure which he is taking--the categories of f (barbituates and sedatives) and g (tranquilizers) should probably be combined to avoid specious interpretations by professionals who might correctly distinguish between sedatives and tranquilizers themselves but who might not be aware of the confusion of the users. If the categories are not combined, perhaps their definitions should be made

clearer in the Manual. In this connection it should be noted that it is at least as important that the users know the difference as it is that consumers of research results know it.

As for scaling possibilities, the very low correlations among the items suggest no common simplifying trend except the possibility of totaling categories f and g; this total would not, however, represent any behavioral trend outside of the specific drug categories involved. The only major source of variation found among the non-opiate drugs is associated with tranquilizers and marihuana, and these drugs are uncorrelated.

C. Other Drug Behavior

Items 23a, b, and l are concerned with cigarette, coffee, and other drug use. While many patients reported using cigarettes and coffee, 102 and 78, respectively, use of "other drugs" was consistently zero. Thus, as might be expected, the correlation between number of days on which cigarettes were used with coffee was highest at .14, while all other correlations ranged in absolute value from .01 to .09. A scale in this category would, therefore, be based entirely on the use of cigarettes and coffee, and would probably be meaningless.

D. Combined Drug Scale

Items which remain as candidates for the combined drug scale are 23c and k (heroin and marihuana use), item 24 (purpose of prescribed medication), and item 25 (time spent in opiate-related behavior). Analysis of these data show substantial intercorrelations among items 24-1, 24-2, 24-3, and 24-4; the correlations ranged from .36 to .65, with an average of .49. These alternatives indicate that medication was taken for sleep, nervousness, pain, and the "blues" or depression. Scale weights determined consistent

with principal (a) were .12, unity, .58, and .41, for 24-1 through 24-4 respectively, suggest that pain and "blues" should get equal weight. If these are given equal weights of unity, then the weights for sleep and nervousness would be .11 and .73, respectively. Since the weight for sleep is so small, and since there is ambiguity in that alternative as pointed out on page 2.8, a solution for a weighting of only nervousness, pain, and depression was sought and found to give weights of unity for pain and the "blues," and .73 for nervousness. This suggests weights of unity and 3/4 (or three times the response for nervousness plus four times the sum of the responses for pain and depression, divided by eleven if a weighted average is desired).

All correlations for items 23c, k, 24, and 25 were less than .20 in absolute value except for the correlations between heroin (23c) and opiate behavior (25), where a correlation of .36 was noted; that is, the more heroin use, the more time spent in opiate-related behavior. The correlation of .36 is consistent with one's expectations but the authors fail to see that item 25 would usefully combine into a scale with 23c.

It is apparent that the construction of a combined drug scale was not feasible, but analysis of the data did, at least, uncover the relations among the reasons for taking medications.

E. Alcohol Behavior

Items 26a, b, and c report figures for beer, wine, and hard liquor usage. Correlations between the number of days used for each type of alcohol suggest that a scale could be defined: the correlations between the number of days using beer and wine, and the number of days using beer and hard liquor are .32 and .27, respectively; the correlation between the use of

wine and hard liquor is .12. Analysis of the covariances of the number of days using the beverages yields scale weights of .94, .27, and .18, which produce maximum variation [guiding principal (a) from page 4.1] among subjects.* These weights suggest that wine and hard liquor quantities might be equally weighted but that a different weight should be used for beer. When the weights for the use of wine and hard liquor are made equal, one obtains maximum variation if the days using wine plus the days using hard liquor is multiplied by .66 when the weight for beer is unity. A rough rule, then, for producing maximum variation would be to triple the weight of beer and, to that product, add double the sum of days using hard liquor and days using wine. This total could then be divided by seven if a weighted average is desired.

Curiously, when the number of days using alcohol is multiplied by the amount used per day, the correlations are reduced to .09 for beer with wine, .15 for beer with hard liquor, and .12 for wine with hard liquor. Thus, trying to estimate the amount of liquor consumed during the 90 day period produced data with intercorrelations so low that a scale seemed unfeasible.

Combining beer, wine, and hard liquor use with items 27 (number of fights resulting from alcohol consumption) and 28 (number of days of work missed as a result of drinking) for a combined alcohol scale also seems undesirable in view of the scarcity of non-zero responses to these questions. In 113 cases, only two fights were reported and no days of work were missed. Of the two fights, one involved a patient who reported high alcohol use,

---

* Analysis of the covariances produces statistics which are sufficient to determine the variance for the scale with the sample data and which are conceptually similar to correlations.

the other a patient who reported low alcohol use. Adding this information to the scale proposed above would, therefore, affect no correlary increase in information.

F. Contacts with Law Enforcement

Items 29 through 32 deal with arrests and convictions, prior to and after drug addiction, and with time spent in jail. The number of cases available for use in a scale of these items is drastically reduced because the cases in Protocol 2 are quite different, in terms of immediate past experience, from those who might be expected to participate in the experimental program. It is believed that the high incidence of incarceration for those individuals in Protocol 2 renders these data unusable for the generation of statistics regarding arrests and time spent in jail.

In spite of reservations about considering so few cases, the data for Protocols 1 and 3 were combined and examined. Seven correlations in excess of .20 were noted; two of these seemed to arise from the inclusion of one patient who had been arrested 150 times and who had been picked up on a non-drug related felony charge in the thirty days prior to giving data. When this case was eliminated from the data, the only notable correlations occurred between items 29 (arrests in lifetime) and 30 (arrest prior to drug addiction), and between items 31-4 (non-drug related felony) and 32 (numbers of days in jail in the last 90 days).

The correlations between items 29 and 30 will not be helpful in detecting changes in behavior since they deal mostly with arrests prior to participation in the program. While item 29 includes arrests which may have occurred since the beginning of a subject's participation in

the study, it is assumed that, unless these are few, a subject arrested often enough to alter the data pattern might well be lost to the study.

It is suggested that item 32 be regarded as useful for detecting change. Although the current statistics don't support it, item 31 could also prove interesting over the length of the program since few provisions for recording interaction with the law are included in the questionnaires.

G. Education/Employment

Items 9, 13, 14, 15, and 16 deal with education and employment. Item 13 (number of days at current job), correlates .66 and .75 with items 14 (number of days employed in last three months) and 15 (amount earned), respectively; items 14 and 15 seem to measure about the same thing, correlating .85. Items 13 and 15 are on a coded scale on the 1 November 1974 revised forms but item 14 is on a literal "number of days" scale. When scale values were investigated for these three items, it was found that the large variation for item 14 created a very inconvenient weight system. Since items 14 and 15 measure similar information (days work versus income), it was decided to omit item 14, using only items 13 and 15 in an employment scale. Using principal (a) and a weight of unity for item 15, item 13 got a weight of .49. Therefore, it is suggested that an employment scale could be made up of the coded response to item 13 plus twice the coded response to item 15. Dividing this total by three would result in a weighted average.

Item 9 (hours spent in school) can be reported as it is (number of hours). The correlation of item 9 with items 13-16 are all less than .20 in absolute value. Indeed, item 16 did not contribute to a scale since it had few non-zero entries.

H. Stability of Living Conditions

Items 6, 7, and 8 deal with living arrangements over the past 90 days. Because identification with Protocol 2 is very much related to living arrangements (i.e. most of these individuals spent all or part of the 90 day period in jail), these data were analyzed for the total group and for Protocols 1 and 3 together. For the total group, the correlation between items 7 (changes in living arrangement) and 8 (change in place of residence) is .75, indicating a tendency for people who change living arrangements to indicate a move. If Protocol 2 data are removed, the correlation rises slightly to .80. For those not in Protocol 2, there is a correlation of -.39 between items 6 (living partners) and 7 which indicates a tendency for those who are living with others to be doing so as the result of a recent change.

Without using data from Protocol 2, scale weights of .08 and .67 (for items 6 and 7, respectively) were obtained for a weight of unity for item 8. These weights suggest that item 6 might not be needed, that a weight of 2/3 be used for item 7, and a weight of unity be used for item 8 (equivalently, three times the entry for item 8 plus twice the entry for item 7, dividing by 5 if an average weight is desired). It should be noted that item 7 does not make sense unless item 6 is asked previously or unless the "this" of item 7 is changed to "your present."

It is felt that items 7 and 8, in these data, are essentially measures of the same thing. Therefore, recommendations for items 6 and 7 have been made on page 2.2 to obtain a better assessment of the type of move that takes place. In view of this, it is suggested that data for item 8 could be used as the sole index of stability of living arrangements.

I. Constructive Use of Time

Items which might be used to index the constructive use of time include 9 (hours of school per week), 13 (length of current employment), 14 (days gainfully employed in last three months), 15 (amount earned in last three months), 16 (number of job changes in last three months), 25 (hours spent in opiate-related behavior), and 32 (days spent in jail). Items 9, 13, 14, 15, and 16 have already been discussed in this section (Education/Employment, page 4.10). Their correlations with item 25 and 32 were low for scaling purposes, the three largest in absolute value lying between .20 and .25.

A scale can be constructed on non-statistical grounds for these items. It is suggested that items 9, 14, 25, and 32 be used, omitting items 13 and 15 because the information they give is covered sufficiently by item 14 and because they are to be recorded on a coded scale. Item 16 can also be omitted because its correlations are all extremely small (.11 or below in absolute value). The weights for the scale could be formulated to yield 90 day figures as follows: multiply the response to item 9 by 18 (=90/5, where 5 is used as the divisor because the length of a typical school week is five days); multiply the response to item 14 by 90 (number of working days in a 90 day period); multiply the response to item 25 by -90/24; use the negative of the response to item 32. (The sign reversals on items 25 and 32 reflect the judgment that opiate-related behavior and time in jail are non-constructive uses of time as compared with time in school and employment). The totals from these calculations can then be added for a combined scale weight.

Table 4.1

Number of Days Using Drugs by Pattern of Use For Item 23

Number of Days Used	Pattern of Use 1	2	3	4
0	-	-	-	1002
1-12	2	10	82	-
13-89	9	63	2	-
90	186	-	-	-

1356

Table 4.2

Pattern of Alcohol Used by Number of Days Used for Item 26

Pattern of Use	Number of days used: 0	1-12	13-24	25-48	49-89	90
0	180	-	-	-	-	-
1	-	-	-	-	-	0
2	-	-	-	-	-	22
3	-	-	-	1	3	-
4	-	1	-	10	3	-
5	-	5	9	5	-	-
6	-	11	9	2	-	-
7	-	77	1	-	-	-

339

V. Summary and Conclusions

The suggestions for future Questionnaire and Manual development presented in Sections 1 and 2 were based on a thorough review of the available data, comments by other ETS staff members whose strengths lie in the area of instrument development, and many hours of library research. Two major guiding principals were used in developing these suggestions: a) items should be as clear and unambiguous as possible to prevent different interviewers from providing varied interpretations to fit individual patients or clinic study groups; and b) each item should provide as much distinct information as possible about each patient. In some instances (see items 24 and 27, NAS-3) it was found that items could be shortened and still provide the maximum amount of fine-grain information in the study area. In other cases (see items 7 and 8, NAS-3, for example) it was found that increasing the number of response possibilities could elicit more informative answers and, thus, provide clearer distinctions on which patient-to-patient and patient-to-study group comparisons could be based.

The suggested revisions for the User's Manuals were written to enhance the interviewers' understanding of individual items. The data review showed that not all interviewers possessed an equal understanding of items. An example of this is item 25 (prescribed drug use, NAS-3), where legal methadone was listed for the purposes of nervousness (#2), pain (#3), depression (#4), and other (#6) by different interviewers.* While no specific reference to this problem was made in earlier sections, it is felt that a common purpose for prescribed methadone should be defined and should appear in instructions for this item in the Manual. In this and other drug-related items, Manual

---

* These purposes were taken from those cases in which the type of drug was specified; the authors were unable to distinguish methadone use from other prescribed drug use in all other cases.

instructions should be written with a clear idea of the limitations of the varied types of interviewers who are involved in data collection. Drug distinctions which may be clear to physicians or other medical personnel (e.g., the distinction between sedatives and tranquilizers) may be hazy in the minds of some interviewers--a problem which could unnecessarily bias study results.

An interesting and unexpected phenomenon which was revealed through data review was the relatively small use of "illicit" drugs by the study population. Drugs which were used most often (excluding cigarettes and coffee) were marihuana (used by 52% of the study population) and heroin (41%). Tranquilizers were the next most prominent drug (used by only 11%) followed by cocaine (10%), methadone (9%), other opiates (8%), barbituates (6%), and amphetamines (4%). None of the cases reviewed reported any use of hallucinogens or of other drugs. The authors suspect that these findings may represent more an indicator of misunderstanding about drug types than an index of the study population. It is strongly recommended that a list of "street names" be provided to each interviewer to alleviate this difficulty in case it does, in fact, exist. If the results, as they now appear, prove to be an accurate index of drug use within the study population, the production of a drug "street name" reference will cause no harm to future results.

Scale possibilities were explored using two guiding principals: scale weights were to be chosen to a) maximize variation among respondents, and b) yield as understandable a scale as possible. With these two principals in mind, data from 113 complete cases were used to compute intercorrelations for all items which were included in each of the proposed scales. While most of the computations resulted in item correlations which were too low

to make scale development feasible, five scales were developed: combined drug use, alcohol behavior, stability of living conditions, education/ employment, and constructive use of time.

A. Combined Drug Use

The results of analysis for the combined drug scale suggested the use of three times the response for nervousness (24-2) plus four times the sum of the responses for pain (24-3) and depression (24-4) as scale weights under principal (a). This produces scale values of unity and 3/4 which may be divided by four if weighted averages are desired.

B. Alcohol Behavior

Guiding principal (a) was also used in the development of an alcohol behavior scale. Analysis showed that maximum variation is obtained if the sum of the days using wine (26b) plus the days using hard liquor (26c) is multiplied by .66 when the weight for beer (26a) is unity. A rough rule, then, would be to triple the weight of beer and , to that product, add double the sum of days using hard liquor and days using wine. This total could then be divided by seven to produce a weighted average.

C. Stability of Living Conditions

Correlations for items 6, 7, and 8, items which make up the scale for stability of living conditions, suggest that maximum variation can be achieved by using a weight of 2/3 for item 7 and a weight of unity for item 8. Equivalently, this can be computed by adding three times the entry for item 8 to the product of twice the entry for item 7. This total can be divided by five if a weighted average is desired. However, it appears that items 7 and 8, in these data, are essentially measures of the same thing. Thus, suggestions were made on pages 2.2-2.4 for item

revisions which would elicit more distinct information.

D. Education/Employment

An employment scale was developed using items 13 (number of days in current job) and 15 (amount of money earned in the past 90 days). Using principal (a), the weights for these items are .49 and unity, respectively. Therefore, the employment scale could be made up of the coded response to item 13 plus twice the coded response to item 15. This can be divided by three if a weighted average is desired.

E. Constructive use of time

A non-statistical scale for the constructive use of time was developed using items 9 (hours in school per week), 14 (days gainfully employed in the last three months), 25 (hours per day spent in opiate-related behavior), and 32 (days in jail in the last three months). It was found that weights could be formulated to yield 90 day figures as follows: multiply the response to item 9 by 18; multiply the response to item 14 by 90; multiply the response to item 25 by -90/24; and use the negative of the response to item 32. The totals from these calculations could then be added to give a combined item weight.

Correlations were reported in Section IV for all other proposed scales and non-weighted scaling possibilities were suggested.

Appendix I

4 September 1974 Editorial Comments

2 December 1974 Editorial Comments

Subcontract No. MS 45-74-94, "Editing and Scaling of Instrument Packets of Narcotic Antagonists"

Comments and Suggestions for the 1 May 74 Revision of Study Instruments and 3 June Revision of User's Manual

Educational Testing Service

Princeton, New Jersey

September 4, 1974

R. F. Boldt, Principal Investigator

N. L. Gitomer, Research Assistant

Proposed Changes in Questionaire and Manual

Item 5. p. 8 Manual

... "Some trade school would be equivalent to Completed High School (5), while others would not."

Change suggested:

Trade schools which offer an accredited degree would be equivalent to Completed High School (5), while other non-accredited trade schools would not.

Item 9. Questionnaire

Change suggested:

Report the number of hours per week that you attend an accredited school. (If not in an accredited school, write "0").

9a. Report the number of hours per week that you attend training programs other than in an accredited school.

Manual:

9a. If the patient is involved in any on-the-job training, vocational rehabilitation training, apprenticeship program or other vocational program which leads to a serviceable trade but which does not lead to a certificate or a diploma, record the number of hours he attends each week. If he is not attending, write "0".

Item 10. p. 9 Manual

Addition suggested (between sentence 2 and 3)

Occupations may be legal or illegal in nature and may include work carried out in prison (esp. Protocol 2).

Item 11. p. 9 Manual

In-prison jobs which have been carried out continuously may be included here.

Item 14. Questonnaire

Change suggested:

In the last 3 months, how many days have you been employed in a position for which you received pay or other direct benefits such as room and board?

Manual, p. 10 (after sentence 1)

Employment in which pay or benefits were not a direct result of the work performed (ex: room and board for prison inmates) are not considered. If the patient is not currently working or is not receiving direct benefits from his work, write "0".

Item 15. Questionnaire

Change suggested:

During the last three months, how much did you earn by legal means?

Item 17. p. 10 Manual

Change suggested:

If either #1 or #2 is marked, the interviewer will assess the patient's degree of intrinsic motivation.

Item 23d. p. 11 Manual

Change suggested:

Note: Illegal methadone should include all of this drug except that which is dispensed by a treatment center or drug program of any kind.

Item 24.

Note: We are assuming that all patients included in Protocol 3 (methadone maintanance) have been in a methadone maintance program for the past three months. If this is a correct assumption, methadone should not be included in this question. If this is an incorrect assumption, should methadone be included as a prescribed drug?

Item 32.

Additional items suggested:

a. In total, how many months have you spent in jail in your lifetime?

b. How long ago, in days, was your most recent release from jail? (Would it be more appropriate to specify weeks as the time denomination here?)

Item 32. Note for Manual

a. Time in jail. Report here the total number of months which the patient has spent in jail.

b. Release from jail. Report here the number of days since the patient's most recent release from jail. Include day of release in this count.

Item 23.

Suggested additions:

For the drugs listed below, please give information requested at right for the last 3 months.

a, cigarettes

b, coffee

c. heroin
(junk, smack)

d. methadone
(other than that which is legally dispensed by a treatment center)

e. other opiates
(dreamer, morpho, pop, schoolboy)

f. barbituates, sedatives
(barbs, yellows, reds, sleepers)

g. tranquilizers
(downers, downs)

h. cocain
(coke, snow)

i. amphetamines or similar agents
(pep pills, bennies, speed, uppers)

j. hallucinogens
(L.S.D., acid, mescaline, peyote)

k. marihuana
(maryjane, pot, grass)

l. other
(specify)

Note: Is it possible that these "street names" may be taken to mean different drugs by different sub-cultures?

Protocol 2

It has come to our attention that various questions elicit different types of answers from patients who fall in Protocol 2 (parolees, probationers, etc.). This seems to suggest a separate analysis for this Protocol. The items which seem to call for this separate consideration are listed below.

Item 7. Has this living arrangement remained the same during the past 3 months?

In answering this question, patients who have recently been released from prison would seem to indicate an instability. In a final analysis, it is possible that a released prisoner would seem to have become more stable (in terms of living conditions) when, in fact, this change may be due to the effects of prison release.

Item 8. See note under Item #7

Item 13. How long have you held your current job?

Patients who have recently been released from prison may have held their current job from the time of their release. If this period is short, however, this may be taken as an indication of job instability, which it is not.

Item 15. During the past three months, how much did you earn by legal means?

If a patient had been in prison during most of, or all of, the three months prior to the study, his monetary gains would be few, if any. However, if these gains increase during the period of the study, these

gains may reflect an increase in stability due to the drug rather than factors due to prison release.

Item 16. How many times did you change jobs during the last three months?

See note under Item #7

Item 20. How many separate admissions have you had to treatment programs for narcotic addiction in your life?

a) Many prisons currently have programs of treatment for incarcerated addicts. Would these programs be included in the answer to this question?

b) In other prisons, withdrawal from narcotics is forced by the nature of the situation alone. In such instances, while there is no formal program, inmates enter into drug withdrawal in the "cold turkey" manner which is used in some formal treatment centers. Thus, would prison admission also be considered as an admission to a drug treatment program?

Item 21. How many months of treatment for narcotic addiction have you had in your life?

See note under Item #20

Item 22a-d

See note under Item #20

Item 23. Drug behavior (continued)

The drugs listed in this question (with the exception of cigarettes and coffee) are not normally available to prison inmates. Patients

who have have spent the three months prior to this study in jail would, therefore, appear to be free from drug abuse. In a final analyses of this study's results changes in drug usage may appear to be a result of the study when these changes may, in fact, be due to the effects of prison release.

Item 25. In the last three months, what part of the day in a typical day was spent in opiate-related behavior?

Recently released prisoners may appear to have spent little or no time in opiate-related behavior when, in fact, the confines of prison prohibit such behavior.

Item 26. Alcohol behavior

See note under Item #23

Item 27.

See note under Item #23

Item 29. How many times in your life have you been arrested or convicted for offenses other than ordinary traffic violations?

Patients who have spent much of their lives in jail for a single conviction would appear, in this response, to have had very few contacts with law enforcement agencies. When compared to other patients who have had numerous minor convictions, these patients would appear to have a greater degree of trouble-free times.

This also applies to questions 30 and 31.

Suggested Changes for Clarity

Item 27. Questionnaire

Number of times during the past three months that you got into fights when drinking or have shown aggressive behavior changes while drinking any alcoholic beverages.

Manual:

p.v. If he does not sign the consent form, or signs the form and does not participate in the study, he is identified for the study purposes as a "refuser" and will be contacted three months later at which time the Craving Scale (NAS-4) and the Status Interview (NAS-10) are completed.

p. 7. Name and Title of Reporter. sentence 5

To the extent possible, each patient should have the NAS-3 completed, at specified times, with the same interviewer

Questions

Item 9. p. 9 Manual

... "formal educational program which leads to a certificate or a diploma."

1) Does the program necessarily have to result in a certificate or diploma?

2) Does any program which offers a certificate or diploma necessarily count?

Additions

Item 6. p. 9 Manual

If patient is a prison inmate, mark #2 if he is living with a cellmate.

Item 8. p. 8 Manual

If patient is prison inmate, changes in cell need not be recorded as changes in residence.

Subcontract No. MS 45-74-94, "Editing and Scaling of Instrument Packets for the Clinical Evaluation of Narcotic Antagonists"

Comments and Suggestions for the 1 November Revision of Forms NAS-3, NAS-6, NAS-11, NAS-12A, and NAS-12B

Educational Testing Service

Princeton, New Jersey

December 2, 1974

R. F. Boldt, Principal Investigator

N. L. Gitomer, Research Assistant

INTRODUCTION

The following pages include general comments and suggested revisions pertaining to the 1 November version of NAS data collection instruments. These suggestions are the product of a literature search, a review of data which have already been collected, and of discussions with several ETS staff members whose strengths lie in questionnaire development and usage. It is important to note that the worth of these comments is intended to lie in their timeliness and thus a degree of thoroughness was sacrificed.

It is necessary to acknowledge that not all interviewers are readers of Manuals. Nevertheless, it is important that the Manual be read by all interviewers prior to their first interview. We believe that interviewers would be best prepared if they were instructed to conduct at least a mental rehearsal of the interview before their first introduction to a case. To alert the interviewers to this necessity, a cover letter stressing the importance of a thorough reading of the Manual should be sent to every clinic.

We suggest that, along with the following comments, some specification of administrative procedures should be included in the Manual. In order to insure the best possible results from all clinic sites, the Manual should prescribe an interview technique which will provide interviewers with a ready reference on how to proceed in general and in response to questions about specific items. Some question stems are written as if they were meant to be read; some were clearly addressed to the interviewer. Is this because it is intended that they be administered as written, or because it is easier to write them that way? In brief, it is

our belief that these and other such questions may arise in day-to-day interviewing and, in order to prevent confusion or haphazard data collection, should be dealt with in the Manual prior to their occurrence.

Finally, it is our hope that the following suggested modifications will be combined with the special knowledge of other concerned individuals to produce stronger, more informative data collection instruments. If time does not allow for inclusion of our comments into the current questionnaire, then it is our hope that, at the very least, these ideas will lead to fruitful discussions in the future.

FORM NAS-3

Item 3 --If "white" is used as a population group, then some people in other groups will infer that our classification of them is "non-white" and may resent it. Therefore we suggest that alternative six be changed from "white" to "occidental" with the latter term defined in the Manual.

Item 4 --Some people feel that divorces occur for reasons quite different from those for which the death of the spouse occurs. The differences, presumably related to interpersonal processes, might be related to dependent variables in the study. Therefore it is suggested that, in addition to "currently married" and "never married," the alternatives of "separated or divorced" and "unmarried because of death of spouse" be included.

Item 5 --We suggest that "grammar school" be changed to the more generally used "elementary school," and that the definition of the "equivalent of college" be included in the Manual. If it is technical school, you could say so; if more, then examples could be given.

Item 6 --There is a difficulty in defining "normal daily routine." Would it be consistent with the intended function of this item to have it read "...you were unable to choose your own activities?" If not, at least some careful attention to the definition of "normal daily routine" should be included in the Manual.

Item 7 --We suggest changing the stem to:

Do you live 1) alone, or 2) with others?

This change merely introduces a neutral wording with respect to cohabitation. Other alternatives that might be more informative are:

0. Alone 1. Spouse (and children) 2. Parents 3. Friends

4. Girlfriend 5. Jail 6. Therapeutic community

7. Other _____

These alternatives, with the exception of number six, are taken from Coskey, W. R., Ipsen, J., Premkumar, T. An inquiry into the nature of changes in behavior among drug users in treatment, from Appendix IV in Drug Use in America: Problem in Perspective, National Commission on Marihuana and Drug Abuse, Superintendent of Documents, U. S. Government Printing Office, Washington, D. C., 1973, page 340.

Item 8 --If the alternatives listed in item 7 above are used then item 8 could ask: With whom, other than those indicated in item 7, did you live? If this stem were used, then alternatives 2, 3, 4, and 6 could be modified to incorporate the word "other." For example, alternative 2 could read: Parents or other parents.

Item 9 --We suggest a more neutral wording of the stem as follows:

Did you change your place of residence during the past three months?

Item 10a and b --Alternatives under 10a should include course work that leads to a degree or other certificate, or course, but probably should also include training in an apprenticeship program. For example, the Department of Labor can certify the completion of electricians' training and these certificates are useful information for other potential employers. Item 10b should probably be limited to training that leads to a proficiency for a particular employer but not necessarily to industry-wide status as a skilled tradesman. Thus, on-the-job training could come under 10a only if it leads to journeyman status. College courses not taken as part of a degree program might belong to part of 10b. In any case, the qualification that the school should be accredited

might not serve you well.

Items 11 -13 --We suggest that the Manual should clarify whether "student" and jobs in jail are considered legitimate.

Item 18a--The alternatives are not mutually exclusive and our inclination is to suggest that multiple answers be allowed. It seems important and reasonably likely that several factors could lead to participation in the program for some people, and that these people might do better than others. By allowing only a "primary" reason you may simplify the tabulation of responses at the cost of valuable information. We would not suggest the acceptance of multiple responses if we didn't think that they could be tabulated without too much difficulty. If one must have a primary reason (though none may exist), you could ask the patients to X one alternative and circle others which might be contributing factors.

Another approach to this question is to change it as follows:

Who is most responsible for your desire to be opiate free?

1. self
2. wife
3. relative or friend
4. Criminal justice system

And what is the reason?

5. poor health
6. must join a program to keep on parole
7. difficulties in obtaining opiates
8. difficulties in obtaining money
9. legal consequences if caught (other than parole violation)
10. other _____
specify

Item 18b--We suggest that the word "actual" be replaced as it introduces far too many complications and ambiguities. Perhaps the wording could be: Reasons apparent to the interviewer for the patient's desire to be opiate free.

Item 18c--The type of motivation should be made explicit, if possible. Is it motivation to be opiate-free, just to be in a program, to complete the program, all of these, or what? Also, it makes sense to put this question at the end, so the interviewer has the maximum chance to form an impression before he marks his answer.

Item 19 --We suggest that a list of "other opiates" should appear in the Manual Would codeine, morphine, methadone, and possibly demerol be sufficient? One using "tranquilizers" might think he is taking "opiates" when these words are used in the ordinary way.

Item 22 --A wording which might make this question easier is as follows: "How many months of treatment for narcotic addiction have you had in your life, excluding those months spent in this program?"

Item 23b--The Manual should note th[illegible]ail, hospital, or other such enforced opiate-free periods should not be recorded unless it is so stated.

Item 23c--The suggested alternatives mentioned in the comments for item 18a may also apply here.

Item 24 --We find that the response to column B is a rough scaling of the response to item A; the information elicited in column B does not add knowledge about the pattern of use. We prefer the question of column A to that of column B because you can always make gross categorizations of the information on column A, but you can never recover sharper discriminations from the categories of column B. For the response currently in column B, you could substitute the recording of the longest

period of abstention, in days. That would tend to tell you that the use was spaced or spree-like (for instance, if the longest period of abstention was 4 days and the total usage (Col. A) was 42, then the usage was regular at three consecutive days a week). If it is desirable to find out whether the use was restricted to weekends, as might be the case in the example above if the total usage was 26, a separate question should be introduced.

Also, we have noticed throughout the questionnaire a very generous use of space. Perhaps this use makes the recording of responses and key punching easier, but the sheer volume of paper may someday come to haunt you. In this item a shortening could be achieved using the format attached in Tab A. Our impression is that pages 7 and 8 could be condensed into a single page. In our example we admittedly achieved the condensation in part at the expense of column B.

Item 24 --We suggest that a list of street names of drugs be included in the Manual. On the forms we've seen, no one has noted the use of "hallucinogen" but some might have noted the use of "acid" or "sugar" if given the opportunity. Tab B contains some street names used by the Bureau of Narcotics and Dangerous Drugs, and which you may wish to use in the Manual. Interviewers should probably be prepared to speak in these terms.

Item 25 --The types of drugs in alternatives 2 and 3 are not clearly mutually exclusive unless in category 2 you mean calming drugs used regardless of the effect on consciousness, while in category 3 you mean calming drugs which are not intended to effect consciousness. If so, the Manual should say so. But the distinction may be difficult for the interviewer

to make. Wouldn't it be clearer to have the drug identified than use a distinction based on its intended effect on consciousness? If the effect on consciousness is not the distinction of interest but one exists that is not chemical, it should be given in the Manual.

For patients in Protocol 3, should methadone be considered a prescribed drug? If so, what would be the right purpose to record for taking it?

Was the omission of OTC drugs intentional?

The addition of "stay awake" as a purpose is suggested, as is the addition of "don't know" to the list of types of drugs.

Item 26 --This suggested rewording might be easier to understand:

How many hours in a typical twenty-four hour day were spent in illicit drug-related behavior during the last three months?

The Manual should clarify whether this pertains to all days or only days on which drugs were used. It should also explain how to regard money legitimately earned but to be used to get drugs.

Item 27 --This item is similar to item 24, so possibly the use of column B to record the maximum period of abstention might be appropriate; a separate question could be used to find out about weekend drinking behavior.

In column C, at least one quantity should be given exactly, either on the form or in the Manual. That is, the interviewer should easily be able to find out exactly how many ounces are in a quart in case he needs to do arithmetic (for example, a patient may be able to speak only in terms of fifths). If the use of column B is retained as is, a weekend drinker could mark <u>both</u> 2 and 3. Possibly this is not what is intended. Therefore the alternatives could be changed omitting alternative three

and leaving:

0. Never
1. Less than once weekly
2. Once a week
3. 2 days/week
4. 3-4 days per week
5. 5-6 days/week
6. Daily

and asking for a "w" if the drinking is limited to weekends. This would allow responses of 0 to 6, and the addition of responses of 1-w, 2-w, and 3-w which would also be meaningful.

Items 28 -29 --Our understanding is that an alcoholic is precisely the person who is likely to answer a zero for these items either as a falsehood or as a result of self deception. Perhaps a distinction between heavy drinkers (item 27) who put a zero here and those who put non-zero entries would prove to be related to the development of other problems associated with the study. Anyway, the interpretation of these items should not be made without taking into some account the possibility of lying or the operation of repression-like mechanisms.

Item 30 -31 --A person may forfeit collateral and not know he has been convicted. For example, a patient could be arrested for drinking, be assessed a few dollars fine, get a piece of paper marked "forfeit collateral" and never see a judge. He may not think he has been arrested and convicted when, in fact, he may have been; the Manual should explain this. Our understanding is that different states may have varying regulations concerning the legal status of forfeit collateral. If an accurate legal

record is desired, the Manual could instruct interviewers to look into this for their particular states.

FORM NAS-6

A simply marked scale that might, if examined for trends, identify potential recidivism could be a very great asset. Probably NAS-6 will not prove to be such a scale, but the payoff is so great that it seems worth a test. To make this test requires that the scale be given at least weekly. As it is, the possibility of detecting the value of NAS-6 as an indicator of trends in attitude toward treatment is precluded by the data collection design. It is suggested that more extensive use of the scale be considered.

Direction 1 and the requirement to represent the desire of the previous week seem to be in conflict. We would put less confidence in the patients' memory of past feelings than in those expressed at the time he is interviewed.

If the feelings of the past week are important, perhaps three scales could be used: he could indicate the response which assesses how he feels at a time during the past week when he most wanted heroin; he could indicate the response assessing how he felt at a time during the past week when he was most repelled by heroin, and he could indicate his present feeling. Indeed, as Dr. Klett suggested at one time, he could be asked to indicate the strength of his attraction and the strength of his attraction and the strength of his repulsion at the same time to identify conflict if it is present.

FORM NAS-11

Item 1 --It would probably be informative if you could get some idea of what things are liked and disliked about the treatment. Conceivably, some administrative feature of the treatment setting, one which is not a necessary part of the naltrexone program per se, could account for many

dropouts. If so, the dropping out would not be incorrectly interpreted as a disadvantage of naltrexone treatment if a more detailed question about the reason for dropping out were asked. Indeed, some way of modifying the objectionable administrative feature might be found and naltrexone still be regarded as promising. Or, if some aspect of naltrexone treatment is the culprit, one would want to see what that aspect is.

If you do go into the matter of satisfaction and dissatisfaction more thoroughly, there is the possibility that you may elicit from the patient a set of expressed dislikes which, from his point of view, could be changed but to which the program does not respond. To elicit these opinions from him and then not respond to them may merely irritate him unduly. Therefore, one would need to be quite careful about the alternatives included and the presentation of the question. We are hesitant to suggest alternatives to this question without some preliminary discussion with people who are closer to the treatment program.

Item 2 --Again, the use of added alternatives could be more informative. Since you want to detect change over a period of time with respect to such things as drug use, etc., it might also be useful to find <u>where</u> the addict finds improvement (in his terms) rather than simply finding out <u>if</u> he finds it. For example, this is a good place to ask about his sex life if you want to, and his sex life should improve as he gets further away from the effects of opiates (as should other associated symptoms). We would be glad to try to develop this question further, though we would appreciate some chance to discuss the kinds of areas that seem to be of most interest.

Comments on NAS-3 items (item numbers are given in parentheses) apply to corresponding items in NAS-11: 3(7), 4(8), 5(9), 7a(10a), 7b(10b), 13(24), 14(25), 16(27), 18(29), 20(33).

FORM NAS 12A

It seems that the staff evaluation is likely to serve as at least one of the criteria of success for the program. If so, readers of the final report should certainly want to know how the decisions or ratings were reached. Do they represent the autocratic decisions of a single senior staffer, or are they the combined judgements of specialists? How well do the staffers know the patient (in what role did they interact with the patient and the program)? Indeed it would be useful to get ratings from each staff member separately (the combination of ratings might even be done at BRI so long as some satisfactory weighting of the ratings could be arrived at). Such ratings would allow statistical comparison of agreement among raters, and agreement among the rating items. These data could be of much importance in assessing the outcome of the study.

FORM NAS 12B

The same comments as given in 12A apply here.

Section III has distinctions of short-term vs long-term, and regular vs non-regular treatment. These could be arranged as follows:

	Short term	Long term
Occasional	X	
Regular		X

The four boxes in the table all represent treatment possibilities but only the X'd boxes are listed in Section III. Suppose a patient can look forward to taking some kind of treatment, now and again, for a long time. Suppose further that his doctor does not work at the clinic and has not told the patient anything about the duration of the treatment. Should the interviewer call that patient's physician? Would such contacts raise ethical problems? What are the distinctions between short-term and long-term, and occasional or regular?

TAB A

		Column A	Column B	
24.	For the drugs listed below, please give information requested at right for the last three months (90 days).	Number of days used Code "0" if not used.	Number of times used on a typical usage day. Code "0" if not used.	*enter code for other drugs as follows:
a.	Cigarettes	_____	_____	Codein--code 1
b.	Coffee	_____	_____	Tranquilizers--Code 2
c.	Marihuana	_____	_____	Barbiturates, sedatives--code 3
d.	Methadone(illegal)	_____	_____	Cocaine--code 4
e.	Heroin	_____	_____	Amphetimines or similar agents code 5
f*	_____	_____	_____	Hallucinogens--code 6
g*	_____	_____	_____	Other opiates--code 7 and specify
h*	_____	_____	_____	Other drugs--code 8 and specify
i*	_____	_____	_____	
j*	_____	_____	_____	
		Enter number of days		

* Enter code for other drugs as follows:

TAB B

MORPHINE:	M, dreamer, white stuff, hard stuff, morpho, unkie, Miss Emma, monkey, cube, morf, tab, emsel, hocus, morphi, melter
HEROIN:	Snow, stuff, H, junk, big Harry, caballo, DooJee, boy, horse, white stuff, Harry, hairy, joy powder, salt, dope, Duige, hard stuff, smack, shit, skag, thing
CODEINE:	Schoolboy
MEREPIDINE:	Demerol, Isonipecaine, Dolantol, Pethidine
HYDROMORPHONE:	Dilaudid, Lords
METHADONE:	Dolophine, Dollies, dolls, amidone
EXEMPT PREPARATIONS:	P.G., P.O., blue velvet (paregoric with antihistamine), red water, bitter, licorice
COCAINE:	the leaf, snow, C, cecil, coke, dynamite, flake, speedball (when mixed with heroin), girl, happy dust, joy powder, white girl, gold dust, Corine, Cernies, Burese, gin, Bernice, Star dust, Carrie, Cholly, heaven dust, paradise
MARIHUANA:	smoke, straw, Texas tea, jive, pod, mutah, splim, Acapulco Gold, Bhang, boo, bush, butter flower, Ganja, weed, pot, muggles, tea, hash, hemp, griffo, Indian hay, loco weed, hay, herb, J, mu, giggles-smoke, love weed, Mary Warner, Mohasky, Mary Jane, joint sticks, reefers, sativa, roach, grass
AMPHETAMINES:	pep pills, bennies, wake-ups, eye openers, lid poppers, co-pilots, truck drivers, peaches, roses, hearts, cartwheels, whites, coast to coast, LA turnabouts,

	browns, footballs, greenies, bombido, oranges, dexies, jolly-beans, A's, jellie babies, sweets, beans, uppers
METHAMPHETAMINES:	speed, meth, splash, crystal, bombita, Methadrine, Doe
OTHER STIMULANTS:	pep pills, uppers
BARBITUATES:	yellows, yellow jackets, nimby, nimbles, reds, pinks, red birds, red devils, siggy, seccy, pink ladies, blues, blue birds, blue devils, blue heavens, reds and blues, double trouble, tooies, Christmas trees, phennies, barbs
OTHER DEPRESSANTS:	candy, goofballs, sleeping pills, peanuts
LSD:	Acid, cubes, pearly gates, heavenly blue, royal blue, wedding bells, sugar, Big D, Blue Acid, the Chief, the Hawk, instant Zen, 25, Zen, sugar lump
STP:	Serenity, tranquility, peace,DOM, syndicate acid
PHENCYCLIDINE (PCP):	PCP, peace pill, synthetic marihuana
PEYOTE:	mescal, button, mescal beans, hikori, hikuli, huatari, seni, wokowi, cactus, the button, tops, a moon, half moon, P, the bad seed, Big Chief, Mesc.
PSILOCYBIN:	sacred mushrooms, mushroom
DMT:	DMT, 45 minute psychosis, businessman's special

Appendix II

Dictionary of Occupational Titles

Job Classifications for Current Occupations

1. Professional, technical, and managerial occupations

   Community organizer

   Coordinator, community action group

   Computer programmer

   Custodian

   Data processing

   Draftsman

   Laboratory technician

   Social Worker

   Store manager

   Title examiner

2. Clerical and sales occupations

   Car salesman

   Clerk

   Motel clerk

   Produce receiver

   Salesman

   Shipping clerk

   Steel cutter

   Stock clerk

3. Service occupations

   Dishwasher

   Janitorial

   Park and recreation worker

   Presser in cleaner shop

   Waiter

4. Farming, fishery, forestry, and related occupations

5. Processing occupations

   Baker

   Concrete worker

   Cutter man

   Factory worker

   Highway supply/laborer

   Laboror

   Prison cook

   Utility man

6. Machine trade occupations

   Heavy equipment operator

   Machine operator

   Machinest

   Mechanics helper

   Vacuum furnace operators

7. Bench work occupations

Gun pollisher

Pallet maker

Sub-assembler

Upholstery

8. Structural work occupations

Assembler

Assembler/aircraft parts

Assembler, automobile

Auto factory worker

Bricklayer

Building maintanence

Carpenter

Construction worker

Masonry

Painter

Pipe fitter

Railroad track laborer

Roofer

Serviceman's helper

Sheet metal worker

Spot welder

Welder

9. Miscellaneous occupations

Cab driver

Fork lift operator

Longshoreman

Recreation aid

Short change artist

Temporary service

Ticket agent

Truck dirver

Truck driver, concrete

Warehouse work

Youth supervisor

0. Students

Student

Descriptions of Study Protocol Groups*

Protocol 1

"Street Addicts"

All males over the age of 18 who are physiologically addicted to opiates, at the onset of the study, are considered for possible inclusion in Protocol 1. These individuals may be addicts who are not qualified for methadone maintenance programs, who reject the idea of continued addiction to a narcotic drug (methadone), or who have participated unsuccessfully in other therapeutic programs.

Protocol 2

"High Risk Patients"

All males over the age of 18 who were formerly physiologically dependent on opiates and are considered to be at a particularly high risk of recidivism are considered for possible inclusion in Protocol 2. These individuals may be formerly addicted prisoners, hospital patients, or other individuals who are fearful of becoming readdicted to opiates.

Protocol 3

"Methadone Maintenance Patients"

All males over the age of 18 who are in a methadone maintenance or methadyl acetate program and who wish to become free of all opiates are considered for possible inclusion in Protocol 3. These individuals must be in a methadone or methdyl acetate program in which they have remained for at least the last six months (with no unexcused absences longer than two consecutive weeks) at the onset of their participation in the current study.

---

* Information presented here was obtained from the 15 December 1974 revision of the User's Manuals.

Appendix IV

NAS-3 : Background Data Interview

1 November 1974 Revision

NAS-3 BACKGROUND DATA INTERVIEW

PROTOCOL 3

Patient Code No. ☐☐☐☐☐

Date of Collection ___/___/___ (M D Y)

DIRECTIONS

This form is to be completed when it has been determined that the subject meets the initial eligibility criteria for antagonist therapy (NAS-2) but before he signs the Informed Consent (NAS-4). The patient's answers are to be obtained in an interview conducted by the research project interviewer at the clinic. Once the interviewer is satisfied that the information requested has been obtained, the appropriate response number or response is to be entered on the line provided at the right. In no event should the patient see or complete this form.

PATIENT HISTORY

1. Age last birthday _____ Years

2. Date of Birth ___/___/___ Month Day Year

3. Population Group _____
   1. American Indian
   2. Oriental
   3. Black
   4. Mexican-American
   5. Puerto Rican
   6. Other White
   7. Other (Specify)_____

4. Marital Status _____
   1. Currently married
   2. Previously married (widowed, divorced or permanently separated)
   3. Never married

5. What is the highest level of education you have reached? _____
   1. No schooling
   2. Attended grammar school (1-8)
   3. Completed grammar school (1-8)
   4. Attended high school (9-12)
   5. Completed high school (9-12)
   6. Attended college or equivalent
   7. Completed college or equivalent
   8. Attended post graduate training
   9. Completed post graduate training

6. How many days during the past 90 days (3 months) were you in a jail or hospital? _____ Number Days

STABILITY OF LIVING ARRANGEMENTS

7. With whom do you live? _____
   1. Alone
   2. With others

8. Has this living arrangement remained the same during the past 3 months? _____
   1. Yes
   2. No

9. During the last 3 months how many times did you change your place of residence? _____
   0. None
   1. Once
   2. Twice
   3. Three to five times
   4. Over five times

EDUCATION/EMPLOYMENT

10a. Report the number of hours a week you attend an accredited school. (Courses taken for credit and courses which are officially audited should be totalled. Count any part of an hour as an hour. Enter this number on the line at the right. If not in an accredited school of this nature, write "0".) _____ Number Hours

10b. Report the number of hours a week you attend a training program other than at an accredited school. (Enter this number on the line at right. If not in a training program of this nature, write "0".) _____ Number Hours

11. What is your usual legitimate occupation? (If no usual legitimate occupation, write "0".) _____ Occupation

EDUCATION/EMPLOYMENT (cont.)

12. What is the longest period of continuous legitimate employment that you have ever had? (Assume continuous employment to mean that period in which there was no break of over two weeks [between jobs, moving, etc.] other than for paid vacations. Indicate lowest code applicable. If never legitimately employed, write "0".) _____
    1. 2 weeks or less (1-14 days)
    2. 2 months or less (15-60 days)
    3. 6 months or less (61-180 days)
    4. 1 year or less (181-365 days)
    5. 2 years or less
    6. 5 years or less
    7. 10 years or less
    8. 25 years or less
    9. Over 25 years

13. What is your present legitimate job? (If presently unemployed, write "0".) _____ Present Job

14. How long have you held your present legitimate job? (Indicate lowest code applicable. If presently unemployed, write "0".) _____
    1. 2 weeks or less (1-14 days)
    2. 2 months or less (15-60 days)
    3. 6 months or less (61-180 days)
    4. 1 year or less (181-365 days)
    5. 2 years or less
    6. 5 years or less
    7. 10 years or less
    8. 25 years or less
    9. Over 25 years

15 How many days during the last 90 days (3 months) have you actually spent on a job for which you were legitimately employed in a position for which you received pay or other direct benefits such as room and board? (If none of the time, write "0".) _____ Number Days

16. During the last 90 days (3 months) how much did you earn in take-home wages or salary by legitimate means? _____
    0. Nothing
    1. $1-$25
    2. $26-$75
    3. $76-$125
    4. $126-$175
    5. $176-$225
    6. $226-$500
    7. $501-$1,000
    8. $1,001-$2,000
    9. $2,001-$4,000
    10. Over $4,000

EDUCATION/EMPLOYMENT (cont.)

17. How many times did you change legitimate jobs in the last 90 days (3 months)? (If not legitimately employed during the last 90 days, write "0".) _____ Number Times

PATIENT MOTIVATION/DRUG HISTORY

18a. What is your primary reason for wanting to be opiate free? _____
1. Self
2. Wife
3. Relative or friend
4. Criminal Justice System
5. Health
6. Difficulty obtaining opiates
7. Difficulty obtaining money
8. Other (Specify)_____

18b. Interviewer to indicate reason for actually being in a program. _____
1. Self
2. Wife
3. Relative or friend
4. Criminal Justice System
5. Health
6. Difficulty obtaining opiates
7. Difficulty obtaining money
8. Other (Specify)_____

18c. Interviewer/Staff impression of patient's motivation. _____
1. None
2. Slight
3. Moderate
4. High

19. How old were you when you first started using heroin or another opiate drug? _____ Age in Years

20. How old were you when you first started using heroin or other opiates daily? _____ Age in Years

21. How many separate admissions, excluding this program, have you had to treatment programs for narcotic addiction in your life? _____ Number Admissions

22a. How many months of treatment, excluding this program, for narcotic addiction have you had in your life? (Treatment periods for all programs should be totalled. Any fraction of a month in the total should be considered an additional month.) _____ Number Months

PATIENT MOTIVATION/DRUG HISTORY (cont.)

22a. How many months of treatment for narcotic addiction have you had in this program? (Count any part of a month as a month.)

Number Months _____

23a. Since you became addicted, has there ever been a period of one week or more (excluding jail, hospital or this program) when you did not use opiates?

1. Yes
2. No

_____

23b. If "Yes": What were the dates of the beginning and end of the most recent such opiate free period? (If the day can not be determined, write "99" in the space provided for day.)

If "No": Write "0" in the space provided for year in both entries.

Beginning Date: ___/___/___ M D Y

End Date: ___/___/___ M D Y

23c. If "Yes": What was the primary reason for not using opiates during that period?

1. Self
2. Wife
3. Relative or friend
4. Criminal Justice System (other than jail)
5. Health (other than hospitalization)
6. Difficulty obtaining opiates
7. Difficulty obtaining money
8. Other (Specify)_____

_____

If "No": Write "0".

DRUG BEHAVIOR

24. For the drugs listed below, please give information requested at right for the last 90 days (3 months).	Column A Number of Days Used Write "0" if not used.	Column B Pattern of Use 0. Not at all 1. Less than once a week 2. At least once a week but less than daily 3. Daily	Column C Frequency Number of times used on a typical 24-hour usage day. Write "0" if never used.
a. Cigarettes	____ Days	____	____ Number cigarettes
b. Coffee	____ Days	____	____ Number cups
c. Heroin	____ Days	____	____ Times used
d. Methadone (illicit)	____ Days	____	____ Times used
e. Other opiates Specify all:			
____	____ Days	____	____ Times used
____	____ Days	____	____ Times used
f. Barbiturates, sedative agents (illicit)	____ Days	____	____ Times used
g. Tranquilizers (illicit)	____ Days	____	____ Times used
h. Cocaine	____ Days	____	____ Times used
i. Amphetamines or similar agents (illicit)	____ Days	____	____ Times used
j. Hallucinogens	____ Days	____	____ Times used
k. Marijuana	____ Days	____	____ Times used
l. Other (illicit) Specify:			
____	____ Days	____	____ Times used

DRUG BEHAVIOR (cont.)

25. List number of days in the last 90 days (3 months) that you took medicine (prescribed only) for the purposes below, and indicate type of drug taken.

Type of Drug
1. Opiate
2. Barbiturate/sedative
3. Tranquilizer
4. Amphetamine or similar agent
5. Other - Specify
6. Unknown

	Number of Days	Type of Drug
1. Sleep	_____	_____
2. Nervousness	_____	_____
3. Pain	_____	_____
4. The "blues" or depression	_____	_____
5. Diet	_____	_____
6. Other _____ Specify	_____	_____

26. In the last 90 days (3 months) how many hours in a typical 24-hour day were spent in illicit drug related behavior? (Count any part of an hour as an hour. Include the time spent in getting up the money by illegal means, securing the drug, administering the drug, "nodding", etc.)

_____ Number Hours

ALCOHOL BEHAVIOR

27. For the beer, wine and liquor, give the information requested at right for the last 90 days (3 months).

	Column A Number of Days Used Write "0" if not used.	Column B Pattern of Use 0. Never 1. Less than once weekly 2. Once a week 3. Weekends only 4. 2 days (other than weekends) 5. 3-4 days a week 6. 5-6 days a week 7. Daily	Column C Quantity consumed on a typical 24-hour usage day. Write "0" if none consumed.
a. Beer (assume 1 can/bottle= 12 oz.)	_____ Days	_____	_____ 1. 1-2 cans 2. 3-4 cans 3. 5-6 cans 4. 7-12 cans 5. 13-24 cans 6. over 24 cans
b. Wine	_____ Days	_____	_____ 1. 1-3 oz. 2. 4-8 oz. (1/2 pt. 3. 9-16 oz. (1 pint 4. 17-32 oz. (1 qt. 5. 33-64 oz. (1/2 gal.) 6. over 64 oz.
c. Hard liquor	_____ Days	_____	_____ 1. 1-3 oz. 2. 4-8 oz. (1/2 pt 3. 9-16 oz. (1 pin 4. 17-32 oz. (1 qt 5. 33-64 oz. (1/2 gal.) 6. over 64 oz.

ALCOHOL BEHAVIOR (cont.)

28a. How many times in the last 90 days (3 months) have you been drunk? (If none, write "0".) _____ Number Times

28b. How many times in the last 90 days (3 months) have you been arrested as a result of your drinking? (If none, write "0".) _____ Number Times

29a. How many times in the last 90 days (3 months) have you missed work or been late to work because of drinking? (If none, write "0".) If unemployed during the period, write "99". _____ Number Times

29b. How many jobs in the last 90 days (3 months) have you lost as a result of your drinking? (If none, write "0".) If unemployed during this period, write "99" _____ Number Jobs

CONTACTS WITH LAW ENFORCEMENT

30. How many times in your life have you been arrested and how many times have you been convicted for offenses other than ordinary traffic violations? (If none, write "0".) _____ Number Arrests _____ Number Convictions

31. How many times were you arrested and how many times convicted for offenses other than ordinary traffic violations before you became an addict? (If none, write "0".) _____ Number Arrests _____ Number Convictions

32. Number of times during the past three months you have been arrested for the following. (If none, write "0" for each category where it applies.)

1. Misdemeanor - drug related _____ Number Times
2. Felony - drug related _____ Number Times
3. Misdemeanor - not drug related _____ Number Times
4. Felony - not drug related _____ Number Times

33. Number of days in the past 90 days (3 months) which you have spent in jail. (In the total, count any part of a day as a day. If none, write "0".) _____ Number Days

34. If you have ever spent any time in jail, what is the date of the beginning of the most recent such occurrence? What is the date you were released? (If currently in jail, enter today's date. If never in jail, write "0". Count any part of a day as a day.)

Entry Date: ___/___/___ M D Y

Release Date: ___/___/___ M D Y

This form completed by _____

Title of position _____

Rev: Nov. 1, 1971

Appendix V

Table A contains product moment correlations coefficients computed in the analyses which led to the scale recommendations. Row and Column designations refer to items number in the 1 November 1974 version of the questionnaire which is included in Appendix IV.

Table A

Summary of Correl

		6	7	8	9	13	14	15	16	23 a	23 b	23 c	23 d	23 e	23 f	23 g	23 h	23 i	23 j	23 k	23 l	1	2
	6	--	-.39	.06	less Protocol Group 2																		
	7	-.09	--	.80																			
	8	-.01	.75	--																			
	9				--																		
	13				.06	--																	
	14				.16	.66	--																
	15				.16	.75	.85	--															
	16				-.02	-.02	.01	.11	--														
23	a									--	.23	-.04	.01							.01	--		
	b									.14	--	-.05	-.08							-.08	--		
	c									-.02	-.09	--	- 0	-.05						-.03	--		
	d											-.03	--	-.02									
	e											-.08	-.03	--									
	f														--	.56	-.02	.53	--	.10	-.02		
	g														.49	--	-.03	.01	--	.28	-.01		
	h														-.03	-.05	--	.02	--	.07	-.01		
	i														.50	.07	-.02	--	--	-.04	-.01		
	j														--	--	--	--	--	--	--		
	k									.01	-.03	.04			+ 0	.16	.09	-.04	--	--	-.05		
	l									--	--	--								--	--		
24	1									-.07	-.12	-.09								.10	--	--	
	2									-.19	-.09	.01								.22	--	.36	
	3									-.11	-.17	-.08								.14	--	.49	.40
	4									-.24	-.09	-.06								.22	--	.52	.51
	5									.12	.16	.14								.05	--	.01	-.05
	6									.10	.18	-.15								.04	--	-.05	-.05
	25	--	--	--	-.12	-.18	.25	-.22	-.03	+ 0	-.15	.36								.07	--	-.05	-.08
26	a																						
	b																						
	c																						
	27																						
	28																						
29	a																						
	b																						
30	a																						
	b																						
31	1																						
	2																						
	3																						
	4																						
	32	--	--	--	-.18	-.24	.12	-.17	-.06														

-- For Items 23 and 26, data above the leading diagonal are for a x c; below is for a alone.

-- Data below the leading diagonal are calculated for the total group.

-- Item numbers refer to the 1 November 1974 forms in Appendix IV.

Table A

Summary of Correlations

			24							26					29		30		31				
	1	k	1	1	2	3	4	5	6	25	a	b	c	27	28	a	b	a	b	1	2	3	4	32
		.01	--																					
		-.08	--																					
		-.03	--																					
3	--	.10	-.02																					
1	--	.28	-.01																					
2	--	.07	-.01																					
-	--	-.04	-.01																					
-	--	--	--																					
4	--	--	-.05																					
		--	--																					
		.10	--	--																				
		.22	--	.36																				
		.14	--	.49	.48																			
		.22	--	.52	.51	.65																		
		.05	--	.01	-.05	-.04	-.02																	
		.04	--	-.05	-.05	-.06	+ 0	-.04																
		.07	--	-.05	-.08	-.07	-.02	-.08	-.05															
											--	.09	.15											
											.32	--	.02											
											.27	.12	--											
																--								
																.27	--							
																.70	.03							
																.29	.02	.24						
																-.05	-.07	-.07	-.08					
																--	--	--	--	--				
										.23						.64	.09	.09	.13	--	--			
																.48	-.06	.60	.04	--	--	-.05		
																-.09	-.10	-.02	.07	--	--	.32	-.04	--